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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,490	03/08/2004	William W. Rowley	39288-0180	2489
24115	7590	06/23/2005	EXAMINER	
BUCKINGHAM, DOOLITTLE & BURROUGHS, LLP			KENNY, STEPHEN	
50 S. MAIN STREET			ART UNIT	
AKRON, OH 44308			PAPER NUMBER	
			3726	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/708,490		ROWLEY, WILLIAM W.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Stephen J Kenny		3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US Patent No 5861200) in view of Rowley (US Patent No 6270125).

Regarding claims 21-23, 25-27, Rowley ('200) discloses a process for joining an inner crosslinked polymeric tube within an outer metallic tube to form a metallic-encased polymeric tube (column 1, lines 17-18, & 27-30).

Rowley ('200) does not explicitly disclose limitations of a connecting means as claimed.

Rowley ('125) discloses a connecting means (20) having the claimed geometry and function. Note, Figures 1-2 of the instant application are identical with regard to the connection means (20) to Figures 1-2 of the '125 patent, which illustrate the claimed steps a-d. That is, one end of connecting means (20) having a ribs (26, 28, 22) is inserted into tube (12) while a sealing means (30) is positioned to form a leak-proof crimping; the other end of connecting means (20) is inserted into tube (16) with a sealing means (30) positioned to form a leak-proof crimping effect. The use of connecting means (20) as disclosed by Rowley ('125) is advantageous in that it provides improved elastic characteristics thereby providing an improved connection as well as aesthetic appeal (column 1, lines 30+). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to join an inner polymeric tube having an outer

metallic tube as disclosed by Rowley ('200) to another of such tube configuration with a connection means taught by Rowley ('125) in order to realize the advantages above.

Regarding claims 24, 28, Rowley ('200) discloses post-processing to effect contact between the polymeric tube & metallic tube (column 6, line 8).

Regarding claims 1-2, 29-30, Rowley ('200) discloses inserting a polymeric tube within a metallic tube which inherently requires the polymeric tube to be of a smaller diameter. Further, the Rowley ('125) patent discloses reducing the diameter of the metallic ring (via crimping means 30) to equal the diameter of the inner polymeric tube.

Regarding claims 3, 31, Rowley ('200) discloses extruding the polymeric tube prior to inserting (column 6, line 3).

Regarding claims 5-6, 32- 34, 43, Rowley ('200) discloses cutting a polymeric tube after extruding (column 6, lines 3+) and fully inserting said polymeric tube into a metallic tube (Figure 27).

Regarding claims 7, 16, 35, Rowley ('200) discloses a process for fabricating which comprises the steps (a) reducing an outer diameter of at least a partially crosslinked polymeric tube from a first outer diameter to a smaller second outer diameter (column 13, line 55), (b) inserting crosslinked a length of said at least a partially polymeric tube having a polymeric tube at least partially into a length of a metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube second outer diameter and approximately equal to said first outer diameter of said at least partially crosslinked

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polymeric tube; and (c) heating said tubes so that said partially crosslinked polymeric tube expands in diameter to approximate said first outer diameter (column 13, lines 56-63).

Regarding claims 8-11, 36-42, 45-48, Rowley discloses 50% ~ 100% crosslinked polyethylene tubes (column 15, lines 12-18) which are extruded prior to or after reducing (column 6, line 3).

Regarding claims 4, 12-15, & 17-20, Rowley discloses extruding prior to reducing & cutting the tube (paragraph 13, line 65).

Regarding claim 44, Rowley discloses sealing an end of the polymeric tube, heating said tube, and expanding said tube via pressurization (column 14, line 3 wherein it is inherent that a seal must be established within a tube in order to pressurize said tube).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

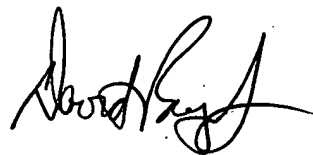
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J Kenny whose telephone number is 571-272-4531. The examiner can normally be reached on mon - fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sk *S. Kenny*



DAVID P. BRYANT  
PRIMARY EXAMINER